

IN THE CLAIMS:

1-21 (cancelled).

22. (previously presented) A graphics system, comprising:
a graphics processing unit (GPU), comprising:

a graphics pipeline; and

an overclocking control module disposed in said GPU configured to evaluate
overclocking parameters in response to a function call received by the GPU, the
overclocking control module including:

a clock controller to control a GPU clock signal generator and a memory clock
generator; and

a graphics pipeline stress tester to implement a stress test that includes executing a
graphics test sequence in said graphics pipeline for selected overclocking parameters and
monitoring errors of said graphics pipeline.

23. (cancelled).

24. (previously presented) The graphics system of claim 22, wherein said graphics system
includes computer executable instructions for running a control panel program for selecting
overclocking parameters and wherein a driver program initiates function calls to said GPU to
evaluate overclocking parameters.

25. (Original) The graphics system of claim 22, wherein said graphics system determines a
maximum safe GPU clock rate.

26. (Original) The graphics system of claim 22, wherein said graphics system determines a
maximum safe memory clock rate of a graphics memory associated with said GPU.

27. (Original) The graphics system of claim 22, wherein said graphics system determines a maximum safe GPU clock rate and a maximum safe memory clock rate of a graphics memory associated with said GPU.

28-32. (cancelled).

33. (previously presented) The graphics system of claim 22, further comprising:
a central processing unit coupled to said GPU; and
a driver program to initiate function calls to said GPU, the driver program identifying sets of overclocking parameters to be evaluated by said GPU from a set of supported overclocking parameters pre-selected for said graphics system that includes a set of graphics processor core clock rates and memory clock rates having an initial starting point and a maximum end point associated with a graphics processor and a graphics memory, the GPU for each set of overclocking parameters automatically applying the stress test with the graphics system and determining a safe set of overclocking parameters within a set of supported overclocking parameters passing said stress test.

34. (currently amended) The graphics system of claim 33, wherein each of supported overclocking parameters includes a fan speed and a the fan speed is automatically selected for said safe set of overclocking parameters.

35. (previously presented) The graphics system of claim 33, wherein said set of supported overclocking parameters includes chip voltages, memory timings, and fan speeds and forming said sets of overclocking parameters further comprises: adjusting at least one clock rate to form at least one new clock rate; and setting a chip voltage, memory timing, and a fan speed for each said at least one new clock rate.

36. (currently amended) The ~~graphic~~ graphics system of claim 33, wherein said set of supported overclocking parameters is stored in an internal table.

37. (previously presented) A graphics system, comprising:
a graphics processing unit (GPU), comprising:
a graphics pipeline; and
an overclocking control module disposed in said GPU configured to evaluate
overclocking parameters in response to a function call received by the GPU, the
overclocking control module implemented at least in part as hardware and including:
a clock controller to control a GPU clock signal generator and a memory clock
generator; and
a graphics pipeline stress tester to implement a stress test that includes executing a
graphics test sequence in said graphics pipeline for selected overclocking parameters and
monitoring errors of said graphics pipeline; and
a central processing unit coupled to said GPU;
wherein the graphics system includes computer executable instructions for running a
control panel program for selecting overclocking parameters and wherein a driver program
initiates function calls to said GPU to evaluate overclocking parameters.

38. (currently amended) The ~~graphic~~ graphics system of claim 37, wherein the driver
program identifies sets of overclocking parameters to be evaluated by said GPU from a set of
supported overclocking parameters pre-selected for said graphics system that includes a set of
graphics processor core clock rates and memory clock rates having an initial starting point and a
maximum end point associated with a graphics processor and a graphics memory, the GPU for
each set of overclocking parameters automatically applying the stress test with the graphics
system and determining a safe set of overclocking parameters within a set of supported
overclocking parameters passing said stress test.

39. (currently amended) The graphics system of claim 38, wherein each of the supported
overclocking parameters includes a fan speed and a the fan speed is automatically selected for
said safe set of overclocking parameters.

40. (previously presented) The graphics system of claim 38, wherein said set of supported overclocking parameters includes chip voltages, memory timings, and fan speeds and forming said sets of overclocking parameters further comprises: adjusting at least one clock rate to form at least one new clock rate; and setting a chip voltage, memory timing, and a fan speed for each said at least one new clock rate.

41. (currently amended) The ~~graphic~~ graphics system of claim 38, wherein said set of supported overclocking parameters is stored in an internal table.

42. (previously presented) The graphics system of claim 37, wherein said overclocking control module comprises a combination of hardware and software.

43. (previously presented) A graphics system, comprising:
a graphics processing unit (GPU), comprising:
 a graphics pipeline; and
 an overclocking control module comprising a combination of hardware and software disposed in said GPU configured to evaluate overclocking parameters in response to a function call received by the GPU, the overclocking control module including:
 a clock controller to control a GPU clock signal generator and a memory clock generator; and
 a graphics pipeline stress tester to implement a stress test that includes executing a graphics test sequence in said graphics pipeline for selected overclocking parameters and monitoring errors of said graphics pipeline.

44. (previously presented). The graphics system of claim 43, wherein the graphics system includes computer executable instructions for running a control panel program for selecting overclocking parameters and wherein a driver program initiates function calls to said GPU to evaluate overclocking parameters.

45. (currently amended) The ~~graphic~~ graphics system of claim 43, further comprising a driver program to identify sets of overclocking parameters to be evaluated by said GPU from a set of supported overclocking parameters pre-selected for said graphics system that includes a set of graphics processor core clock rates and memory clock rates having an initial starting point and a maximum end point associated with a graphics processor and a graphics memory, the GPU for each set of overclocking parameters automatically applying the stress test with the graphics system and determining a safe set of overclocking parameters within a set of supported overclocking parameters passing said stress test.